Catalogue no. 13-604-M — No. 72
ISSN 1707-1739
ISBN 978-1-100-22006-2

Research Paper

Income and Expenditure Accounts Technical Series

Human Resource Module of the Tourism Satellite Account, 2012

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.	not available for any reference period
..	not available for a specific reference period
...	not applicable
0	true zero or a value rounded to zero
0s	value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
p	preliminary
r	revised
x	suppressed to meet the confidentiality requirements of the *Statistics Act*
E	use with caution
F	too unreliable to be published
*	significantly different from reference category ($p < 0.05$)

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Highlights

- Tourism industries in the Human Resource Module (HRM) include five industry groups which are defined as follows: transportation, accommodation, food and beverage services, recreation and entertainment and travel services. Generally speaking, an industry is considered a tourism industry if it would cease to exist, or continue to exist only at a significantly reduced level of activity, as a direct result of the absence of tourism.[1] Together these industries make up the tourism sector.

- The HRM provides the following key statistics for the tourism sector as a whole and for each tourism industry group: number of jobs, hours worked and compensation. These statistics are available by sex, by work status, by age group, by immigrant status and by occupation.

- All statistics provided by the HRM are related to production in tourism industries. For example, statistics concerning jobs are about the number of jobs required to produce commodities in tourism industries whether the commodities are consumed by visitors or non-visitors, that is, local residents.

- In 2012, the tourism sector accounted for 1.7 million jobs, 9.4% of all jobs in Canada. The number of jobs in the tourism sector grew by 1.5%, outpacing job growth in the total economy (+1.0%).

- Nearly all job growth in tourism industries was in full-time employee jobs. About 33,000 such jobs were added in 2012, 23,000 of which were in food and beverage services.

- The food and beverage services industry group was the largest employer among tourism industries in 2012, with more than half of all tourism jobs (915,000 jobs). The second largest employer was recreation and entertainment with 275,000 jobs, followed by accommodation with 230,000 jobs. The transportation industry group was responsible for 222,000 jobs, while travel services provided 44,000 jobs.

- Working hours were shorter in tourism industries compared to jobs economy-wide. The shorter work week is explained by the higher proportion of part-time jobs in tourism.

- Hourly compensation was lower in the tourism sector than economy-wide. The gap widened from $11.30 in 2011 to $11.76 in 2012.

- Food-counter attendants and kitchen helpers and related occupations were the single largest occupation in the tourism sector with 276,000 jobs. Almost all of these jobs (260,000) were in the food and beverage services industry group. Airline sales and service agents were the main occupation in air transportation, but accounted for only 11,000 jobs. In other transportation industries, the most prevalent occupation was bus drivers and subway and other transit operators, with 52,000 jobs. Light duty cleaners were the main occupation in accommodation, with 47,000 jobs, while program leaders and instructors in recreation, sport and fitness were the most common occupation in recreation and entertainment, with 39,000 jobs. Travel counsellors were the main occupation in travel services, with 18,000 jobs.

- One tourism industry group employed a notably older workforce: older workers accounted for 64.1% of all jobs in other transportation industries. The next oldest workforce was that of air transportation, with 44.6% of all jobs held by persons aged 45 years or older.

- More women than men worked in the tourism sector, accounting for 54.6% of employee jobs, and women were more likely to work part-time (43.9% of women compared to 34.2% of men).

- On an hourly basis, wages were lower for immigrants than for non-immigrants in the tourism sector, but on an annual basis, immigrants earned more ($30,400 versus $25,936 for non-immigrants) because they worked more hours.

1. See Appendix B: Concepts and definitions.

This paper reports on the Human Resource Module of the Tourism Satellite Account, 2012 developed by Statistics Canada. This study provides detailed information on employment related to tourism in Canada. Information on wages and salaries, number of jobs and hours worked by occupation is included. The data are also disaggregated by age, sex and immigration status. This study provides a resource for training and planning for tourism in Canada. The report is based upon data published as of May 19, 2013.

This study was prepared by Terrence Martin of the Satellite Accounts and Special Studies Section, National Economic Accounts Division, Statistics Canada. The study was funded through a partnership agreement with the Canadian Tourism Human Resource Council.

1 Introduction

The aim of the Human Resource Module (HRM) is to provide timely and reliable statistics on the human resource dimension of tourism.

Both the Canadian Tourism Satellite Account (CTSA) and the National Tourism Indicators (NTI) already provide some information on the number of jobs generated by tourism at the national level.[2] The HRM complements and enhances the analytical capacity provided by the CTSA and the NTI, allowing for a broader insight into the role of tourism in the economy by providing more detailed human resource information.

For example, human resource planning involves all persons working in tourism industries regardless of whether their job comes directly from serving a visitor or from serving a local resident. Consequently, the total number of jobs in tourism industries is a major focus of the HRM and is much broader than the CTSA and the NTI, which portray only the jobs directly attributable to visitor spending. In addition, some outputs of tourism industries are considered non-tourism commodities because tourism is not a significant source of their demand. Nevertheless, their production generates jobs in tourism industries, and these jobs are included in the overall human resource planning for tourism industries.

The HRM serves as a useful planning and forecasting tool for policy makers in the tourism, employment and training areas. Various tourism-affiliated agencies, academics, and decision-makers in tourism will also be able to use it for research and analysis, planning and development.

Outlining the rest of the report, the scope of the study is described in the next section, followed by an explanation of revisions to the data. Selected results are then discussed to demonstrate analytical uses of the HRM, followed with a selection of relevant data tables.

Appendices A and B discuss the accounting frameworks behind the HRM, key tourism concepts and definitions from the CTSA, and various labour concepts and definitions from the Canadian System of National Accounts (CSNA). Appendix C summarizes the data sources and Appendix D outlines the general methodology used. Appendix E provides a list of North American Industrial Classification System (NAICS) industries included in the industry groups used by the HRM, while Appendix F lists the occupations used by the HRM from the National Occupational Classification for Statistics (NOC-S). A summary of the tables available upon request in the HRM is included in Appendix G. A glossary of terms and a list of references are also provided.

2 Scope of study

The HRM provides a snapshot of the tourism industries and their associated occupations as well as insights into trends over time. Analyses can be made on the following key statistics: jobs, hours worked and employment earnings starting from 1997. Derived variables, such as number of full-time equivalents, average hourly earnings and average annual hours worked per job can also be examined.

These key statistics can be analyzed according to various characteristics of the jobs (employee or self-employed, full-time or part-time, occupation group) and the characteristics of the persons holding them (sex, age group, immigrant status). Information by occupation is also available. Comparisons can be made to the Canadian System of National Accounts (CSNA) employment estimates for the overall economy and for selected industries as well as Canadian Tourism Satellite Accounts (CTSA) and National Tourism Indicators (NTI) aggregates.

The scope of this study is similar to the previous national study[3] with the addition of data for 2012. The information on the number of jobs, hours worked and employment earnings is presented for the same industry groups as before including for full-time and part-time jobs. The information is also available according to the same characteristics of employees (sex, age group and immigrant status) and the same occupations.

2. Some provincial information on the number of jobs generated by tourism was provided in Barber-Dueck and Kotsovos 2003.
3. See Martin 2012.

In particular, the HRM provides annual estimates for the years 1997 up to 2012. These estimates are based on national data from the Canadian Productivity Accounts (CPA),[4] which are a key input to the HRM, as well as Labour Force Survey data (LFS) and the Survey of Employment, Payrolls, and hours (SEPH). Census data for 2001 and 2006 are incorporated. The North American Industrial Classification System (NAICS) of 2007 and the National Occupational Classification for Statistics (NOC-S) of 2006 are used.

3 Changes to methodology

CPA data have been historically revised from reference year 2007 onward. Since this does not cover the entire reference period of the HRM, estimates for the current year in this study (2012) were derived by applying growth rates from CSNA labour productivity data for 2012 to 2011 totals which predate the historical revision. This is an exception to the usual methodology, which will resume with the next HRM update.

4 Revisions

The purpose of this section is to explain the main revisions to previously published HRM estimates.

As part of the usual revision cycle, estimates for jobs, hours worked, and compensation have been revised for reference year 2011. These revisions bring the data into line with benchmark source data from the Canadian Productivity Accounts (CPA) published in May 2012.

Additional revisions resulted from incorporating new data from the Survey of Employment, Payrolls and hours, which is used in the HRM to remove the non-tourism portions of tourism industries.[5]

These changes resulted in minor revisions to the number of jobs, number of hours worked, and total compensation for the tourism sector.

5 Results

This section highlights some of the findings and illustrates some of the types of analyses the HRM can support. The analysis will focus on the year 2012 and on comparisons with preceding years.

5.1 Tourism sector

This section aims to compare key variables of the HRM: jobs, hours worked and compensation for the tourism sector in Canada with the overall economy over time.

Compensation for all jobs

Compensation[6] reached $51.3 billion in 2012 for tourism industries, up 3.7% from the previous year, compared to 4.0% for the total economy (see Table 2). This growth was due to increases in hours worked per week (+1.0%), in the number of jobs (+1.5%), and in hourly compensation (+1.1%). The tourism sector accounted for 5.3% of compensation for all jobs in 2012 (see Table 2).

Jobs

In 2012, tourism industries accounted for 1.7 million jobs. Jobs include both full- and part-time jobs, as well as jobs from self-employment. The tourism sector accounted for 9.4% of all jobs in 2012.

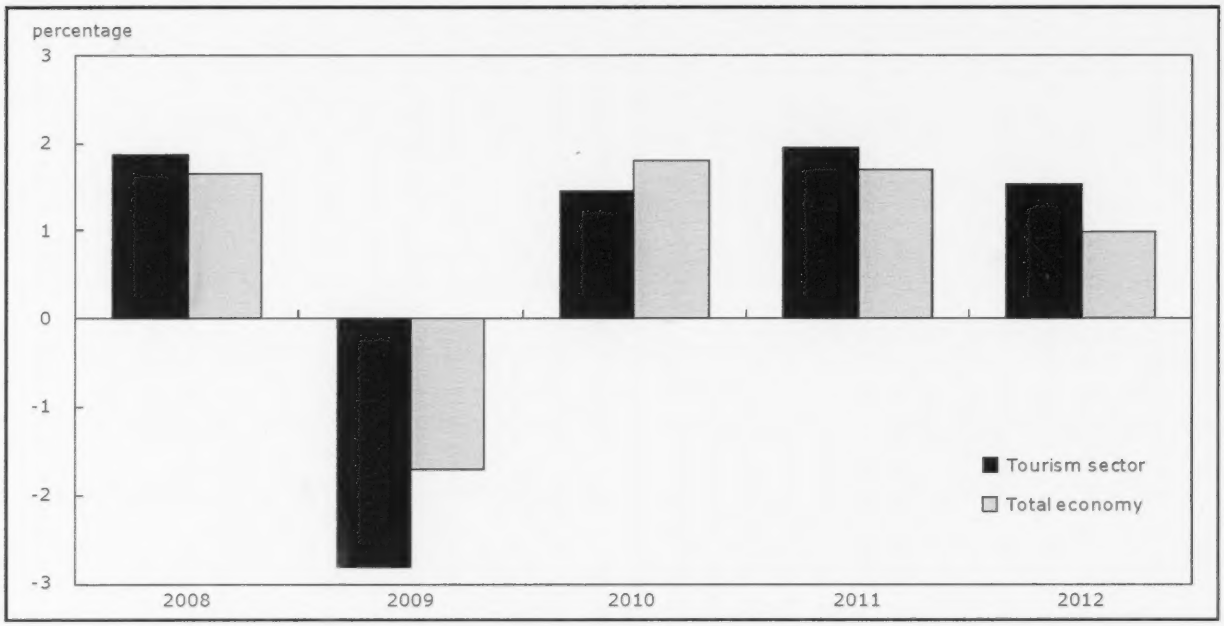
The number of jobs in tourism industries grew at a faster pace (+1.5%) than the number of jobs in the total economy (+1.0%) in 2012, driven mainly by full-time employment in food and beverage services. Growth in tourism jobs also outpaced growth at the total economy level in 2011, though by a smaller margin (1.9% compared to 1.7%).

4. See Statistics Canada 2009b.
5. In March 2013, SEPH data for 1991 to 2012 were revised and put on the new North American Industry Classification System (NAICS) 2012. These revisions will be incorporated in the next update of the HRM. See Appendix C.4 and Appendix D: Methodology for more information on how SEPH is used in the HRM.
6. Compensation is defined as wages and salaries, supplementary labour income and the labour portion of income after expenses accruing to the self-employed.

In the three years since the economic downturn, the tourism sector has grown faster than the total economy (5.0% cumulative growth versus 4.6%), mainly due to the strong growth in the tourism sector in 2012.

In 2012, all of the growth in jobs in the tourism sector was in full-time employee jobs (+33,000).

Chart 1 Annual rate of job growth in tourism industries and total economy, Canada, 2008 to 2012



It should be noted that the estimate of jobs in the HRM is greater than that in the CTSA and the NTI. The HRM concept includes all jobs in tourism industries (1.7 million), whereas the NTI and CTSA concept includes only 'tourism jobs' in tourism industries (that is, jobs in tourism industries attributable to visitor consumption).[7]

Jobs attributable to visitor spending in tourism industries totalled 496,000 in 2012, up 1.4% from the previous year.[8]

Part-time jobs (664,000 jobs) made up 39.4% of all jobs in tourism industries. By comparison, part-time jobs made up 22.4% of all jobs in Canada. In 2012, the share of part-time employment in the tourism sector fell for the first time since 2007.

Self-employment was less common in tourism, accounting for 6.2% of jobs in 2012, compared to 9.0% economy-wide. The number of self-employed in tourism fell by 2.6% when compared to the previous year. Only air transportation and travel services experienced growth in self-employment.

Hours worked per job

The average work week in the tourism sector is shorter than in the rest of the economy. Jobs in tourism averaged 29.1 hours per week in 2012, up 1.0% from the previous year, compared to 32.9 hours for jobs economy-wide (see Table 4). The shorter week in tourism reflects the higher proportion of part-time jobs found in tourism industries than in the total economy.

On the other hand, jobs from self-employment in tourism involved longer working hours (33.7 hours per week) than jobs from self-employment economy-wide (31.6 hours per week).

7. For more information, see Appendix B: Concepts and definitions.
8. See Statistics Canada 2013b.

Compensation per job

Hourly compensation in tourism averaged $20.10 per hour in 2012, up 1.1% from the previous year (see Table 2), but much lower than the hourly compensation economy-wide of $31.86. The gap between hourly compensation in tourism industries versus the total economy reached $11.76 in 2012.

In 2012, hourly compensation for full-time workers in tourism was $21.30, while part-time workers received $15.62.

5.2 Tourism industry profiles

The HRM contains aggregated data for five tourism industry groups: transportation (with details for air transportation and other transportation reported separately), accommodation, food and beverage services, recreation and entertainment and travel services. Appendix E lists the industries included in each industry group of the tourism sector. The following provides selected results intended to give an indication of the kinds of industry analyses possible with the HRM.

Food and beverage services

Among the tourism industry groups, the food and beverage services industry group was the largest employer in 2012. This industry group accounted for 54.2% of all jobs in tourism industries in Canada with 915,000 jobs (see Table 3). In 2012, the number of jobs in food and beverage services increased by 20,000, as falling part-time employment (-0.5%) was more than offset by an increase in full-time employment (+4.9%).

Food and beverage services nonetheless held the highest share of part-time jobs (47.2%) among tourism industries. Not surprisingly, the work week in this industry, at 27.3 hours, was the shortest among all tourism industries and was well below the average work week of 32.9 hours economy-wide (see Table 4).

In 2012, the self-employed held 20,820 jobs in food and beverage services, accounting for 20.0% of all self-employed jobs in the tourism sector. They worked long hours, 40.3 hours per week on average, well above the self-employed average of 33.7 hours per week in the tourism sector.

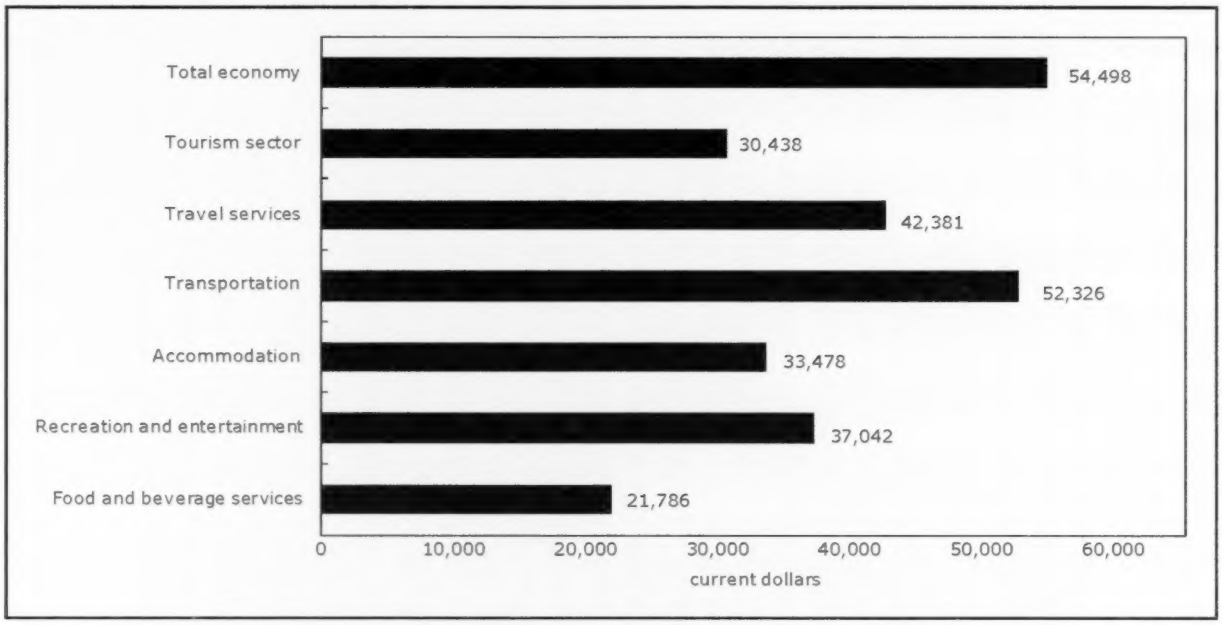
Jobs in food and beverage services continued to pay the least of all tourism industries, with an average hourly compensation of $15.36 in 2012 (see Table 2), up 0.5% from the previous year.[9] It remained well below the average of $20.10 for tourism industries.[10]

It should be noted that the average hourly wage for all employee jobs in food and beverage services was $14.01 in 2012 (see Table 5). This is $1.35 less than the average hourly compensation ($15.36), which includes supplementary labour income (employer contributions on behalf of employees to employment insurance, private and public pension plans, worker's compensation, health and life insurance plans and retirement allowances).

Annual compensation reflects both hourly compensation and hours worked. In food and beverage services industries, jobs paid $21,786 on average in 2012 (see Chart 2). This was well below the tourism sector average of $30,438 but above the 2011 food and beverage services average of $21,309, due to the increases in weekly hours worked and hourly compensation. Jobs in food and beverage services involved the fewest working hours per week and were paid the least on an hourly basis in the tourism sector.

9. This statistic is based on compensation in employee jobs and jobs from self-employment.
10. Gratuities are included in these figures. See Appendix C to understand how gratuities are calculated.

Chart 2 Annual compensation in tourism industries in Canada, 2012



Recreation and entertainment

The recreation and entertainment industry group was the second-largest employer among the tourism industries, providing 275,000 jobs or 16.3% of employment in the sector. This industry group registered job losses of 0.4% in 2012.

The large proportion (42.5%) of part-time jobs in recreation and entertainment contributed to a short work week. Averaging 28.3 hours, it was the second-shortest among tourism industries.

Recreation and entertainment held the largest proportion (46.9%) of the self-employed jobs in tourism industries, with 48,825 jobs. However, these jobs involved shorter hours (27.1 hours per week) than self-employed jobs in the tourism sector overall (33.7 hours per week).

Hourly compensation in this industry ($25.16) was above the tourism sector average ($20.10), but remained below hourly compensation economy-wide ($31.86). Annual compensation reached $37,042 in 2012, above the tourism sector average, even though the work week was among the shortest in the sector.

Accommodation

The accommodation industry provided 230,000 jobs in 2012, or 13.6% of jobs in the tourism sector, making it the third-largest employer among tourism industries in Canada. The accommodation industry group registered its third consecutive annual increase in employment, with growth of 0.5% in 2012.

The industry added 1,000 jobs as a decrease in part-time employment (-6.0%) was offset by an increase in full-time employment (+2.9%). hours worked per week in accommodation edged up to 31.9 hours in 2012, which was above the tourism sector average of 29.1 hours per week.

The proportion of part-time jobs (25.9%) in this industry group, while higher than economy-wide (22.4%), remained below the sector average of 39.4%. This industry's share of self-employed jobs (6.1%) was among the lowest in the tourism sector. The number of self-employed jobs in accommodation continued to decline, falling to 6,380 jobs in 2012, 13.6% fewer than the previous year.

Hourly compensation in accommodation, which includes gratuities, rose 2.6% in 2012 to $20.19, just above the tourism sector average of $20.10. Annual compensation in this industry group, at $33,478, was higher than the sector average, largely due to the longer work week.

Transportation

The transportation industry group consists of air transportation and other transportation, including rail, water and bus transportation, as well as taxis and car rentals. This industry group provided 222,000 jobs, or 13.2% of all jobs in tourism. Jobs in transportation industries were up 2.6% in 2012. Air transportation added three thousand jobs while other transportation industries added two thousand. Most jobs added in air transportation were full-time jobs, whereas most jobs added in other transportation industries were part-time jobs.

Jobs in transportation came with a long work week: on average 33.7 hours, over four hours longer than the average for all jobs in tourism. One reason for the longer hours was the higher proportion of full-time jobs (77.7%), particularly in other transportation industries. Another reason was the relatively high proportion (10.9%) of self-employed workers in transportation industries, who work longer hours. For the tourism sector as a whole, the self-employed made up only 6.2% of jobs. Transportation supported 24,255 jobs from self-employment, 23.3% of all jobs from self-employment in the sector, of which almost all were in the other transportation industries.

In addition to the second-longest work week, jobs in transportation were paid more than in other tourism industries, with an hourly compensation of $29.88, well above the average across all jobs in the sector. Hourly compensation was particularly high in air transportation, at $39.48 per hour.

Transportation is the only industry group in the tourism sector with an annual compensation ($52,326) approaching the national average of $54,498. The long work week and the high hourly compensation in both air and other transportation contributed.

Travel services

The travel services industry group is the smallest among all tourism industries. Travel services provided 44,000 jobs in 2012, just 2.6% of all jobs in tourism in Canada. It trailed the sector in terms of job growth with a loss of 1.5% in 2012.

Jobs in this industry group were predominantly full-time (84.7%), the highest proportion among all tourism industries. Not surprisingly, this industry group had the longest work week, at 35.3 hours. Over 3,700 workers were self-employed, 8.5% of all jobs in travel services.

Annual compensation was among the highest in the tourism sector, at $42,381, owing to the high proportion of full-time jobs and above-average hourly compensation.

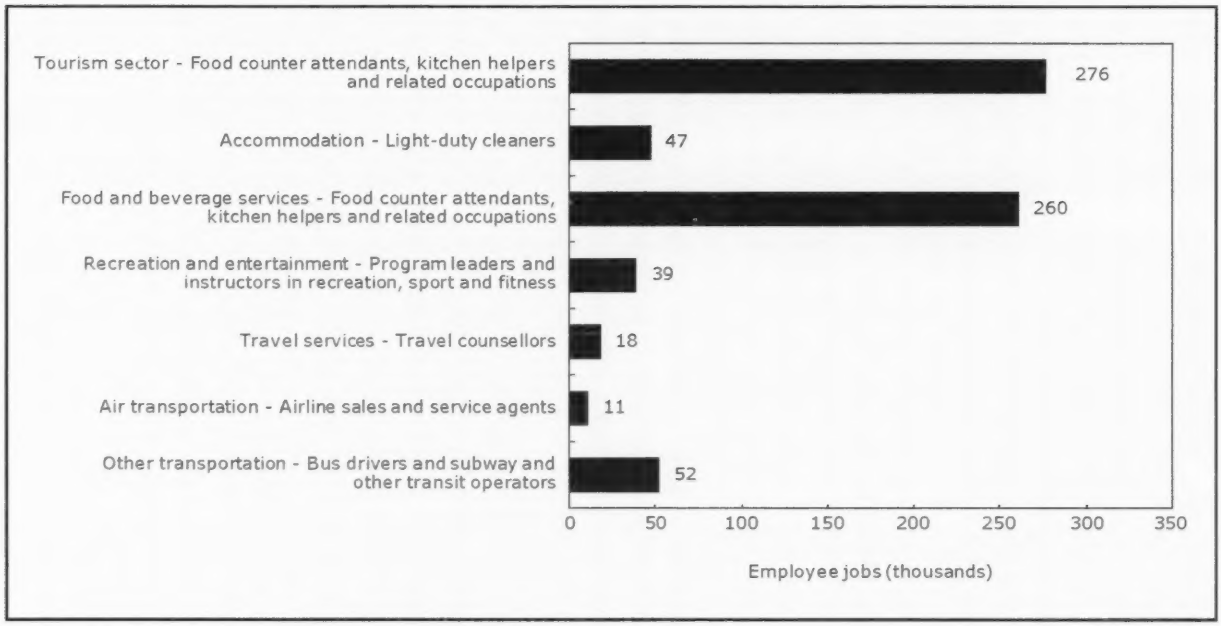
5.3 Occupations in tourism industries

Five occupation groups dominated the tourism sector in terms of employee jobs: food-counter attendants, kitchen helpers and related occupations with 276,000 jobs, of which almost all (260,000) were in the food and beverage services industry group; food and beverage servers with 188,000 jobs; cooks with 150,000 jobs; cashiers with 71,000 jobs; and restaurant and food service managers with 67,000 jobs. Furthermore, these same five occupations also dominated the food and beverage services industry.

The most prevalent occupation in air transportation was airline sales and service agents, with 11,000 jobs (see Chart 3). Bus drivers and subway and other transit operators were the main occupation group in other transportation industries, with 52,000 jobs. The main occupation in the accommodation industry group was light duty cleaners, with 47,000 employee jobs, while program leaders and instructors in recreation, sport and fitness were the most common occupation in recreation and entertainment, with 39,000 jobs. Travel counsellors accounted for only 18,000 jobs, but represented the primary occupation in travel services.

When comparing wages for the most prevalent occupations by tourism industry, airline sales and service agents ($22.57), bus drivers and subway and other transit operators ($22.39), and program leaders and instructors in recreation, sport and fitness ($19.68) earned more than the tourism sector average wage of $17.97. On the other hand, travel counsellors ($17.91), light duty cleaners ($14.90) and food counter attendants, kitchen helpers and related occupations ($12.16) earned less than the tourism sector average.

Chart 3 Main occupation in each tourism industry group in Canada, 2012



5.4 Profile of employees in tourism industries

The HRM provides details concerning three characteristics of employees: sex, age group, and immigrant status. The following highlights some of the HRM results according to these demographics (see Table 5).

Sex

Women working in the tourism sector accounted for 54.6% of employee jobs in 2012. This share has declined from 55.9% in 2005.

Women held 864,000 employee jobs in the tourism sector in 2012, 145,000 more than men. A higher proportion of women working in tourism industries were less than 25 years of age (39.2%) compared to men (34.9%).

Women were outnumbered by men in the transportation industry group. Only 30.1% of the employee jobs in this industry were held by women. On the other hand, women held the majority of jobs in travel services (73.0%).

In all tourism industries, women had shorter work weeks than their male counterparts. This was especially the case for air transportation (27.3 hours per week for women compared to 35.7 hours for men) and other transportation industries. Women (43.9%) were also more likely than men (34.2%) to work in part-time jobs.

Women working in tourism industries in Canada earned on average $4.25 per hour less than men ($15.86 per hour versus $20.11). There was a noteworthy variation in women's wages, with jobs in air transportation paying the most, $27.45, and jobs in food and beverage services paying the least ($13.36). Even though women in air transportation jobs were well-paid, they were still paid $8.95 less than men on average.

The majority of women employed in the tourism sector worked in food and beverage services industries (61.4%), where wages paid to women were the lowest, $13.36 per hour, and the number of hours worked were the lowest, 25.3 hours per week. By comparison, 50.6% of men employed in the sector were in this industry, and were paid $14.82 per hour on average.

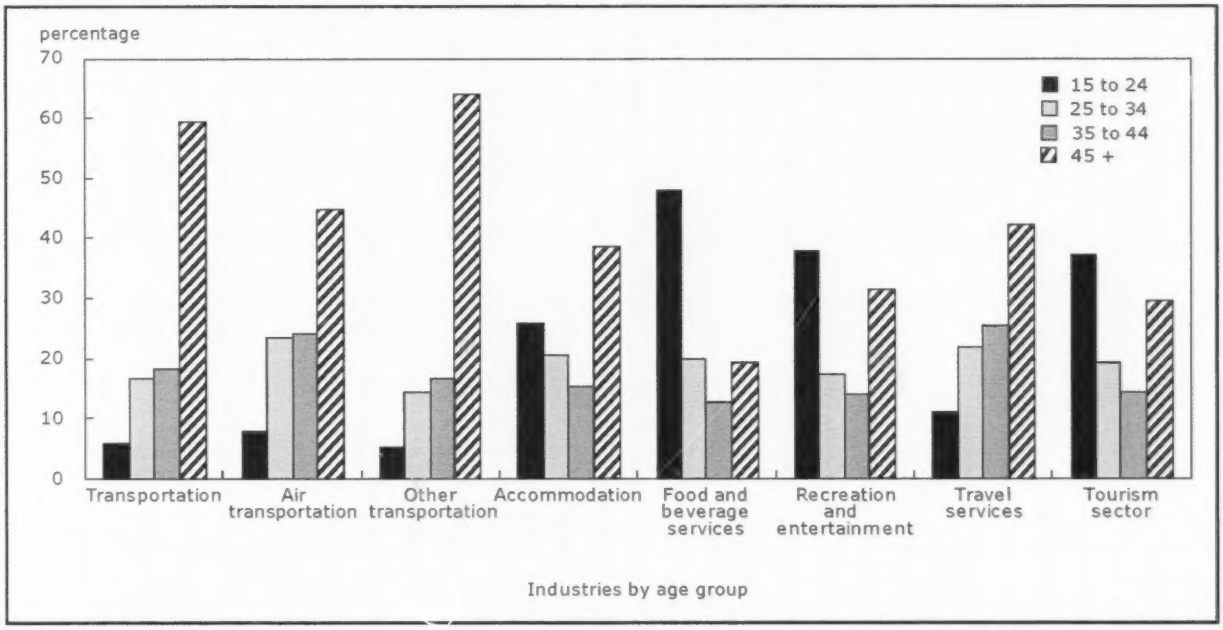
The most common occupation was the same for women as for men, namely, food and counter attendants and kitchen helpers and related occupations. However, this occupation accounted for a greater share of employee jobs held by women (19.3%) than of those held by men (15.1%).

In 2012, women earned an average annual salary of $21,948 in the tourism sector compared to $32,931 for men. This difference stemmed from the lower hourly wages for women and the shorter work week.

Youth and older workers

Youth aged 15 to 24 years were a major source of labour for the tourism industries in Canada in 2012. They held 589,000 employee jobs, accounting for more than a third of all employee jobs in tourism. Three out of four young workers were employed in the food and beverage services industries. The most common occupation among youth was food counter attendants, kitchen helpers and related occupations, and two of every three such jobs were held by a young worker.

Chart 4 Share of jobs by age group and by tourism industry, Canada, 2012



Older workers, those aged 45 years and over, were also an important source of labour for tourism, holding 463,000 employee jobs (29.2%). In 2012, older workers were employed more evenly across all tourism industries compared to young adults. One tourism industry group employed a notably older workforce: older workers accounted for 64.1% of all jobs in transportation industries other than air. By comparison, the next oldest workforce was that of air transportation, with 44.6% of all jobs held by persons aged 45 years or older (see Chart 4).

Almost seven out of ten young workers in tourism held part-time jobs compared to about one out of four older workers. The vast majority of young adults who worked part-time were employed in the food and beverage services industry. Young adults worked about half the hours per week (17.7 hours) of older workers (35.0 hours). The discrepancy was greatest in the recreation and entertainment industries (15.0 hours for young adults versus 34.6 hours for older workers).[11]

Wages of young workers were also considerably lower. The hourly wage among workers in tourism industries aged 15 to 24 was $12.10 in 2012, just over half that of employees aged 45 and over ($21.83). The wage differential between young and old workers was the most pronounced in the air transportation industry group, $15.52 versus $40.00, respectively.

Immigrants

Immigrants were another important source of labour for the tourism sector. In 2012, immigrants held 354 thousand jobs, accounting for 22.4% of employee jobs in tourism.

Over sixty percent of all immigrants employed in the sector worked in the food and beverage services industry, compared to 55.4% of non-immigrants. On the other hand, only 8.4% of all immigrants employed in the sector worked in recreation and entertainment compared to 16.0% of non-immigrants. The concentrations were similar between immigrants and non-immigrants in other tourism industry groups.

Immigrants in tourism industries were older than other tourism workers. About four out of ten immigrants were 45 years or older, while one out of four non-immigrants was an older worker.

Compared to non-immigrants (57.5%), immigrants (70.9%) were more likely to work full-time. In 2012, immigrants worked longer hours than their non-immigrant counterparts, 33.8 hours per week versus 27.4 hours.

Immigrants earned lower wages per hour ($17.31 per hour) than non-immigrants ($18.21 per hour). Wages for immigrants were lower in all tourism industries with the exception of accommodation and recreation and entertainment.

Even though immigrants earned lower wages per hour on average, they compensated by working longer hours. Annual salaries for immigrants averaged $30,400, compared to $25,936 for non-immigrants.

11. According to the Labour Force Survey, in 2012 about 72% of young workers gave attending school as their main reason to be working part-time. Source: Statistics Canada. Table 282-0014 – Labour force survey estimates (LFS), part-time employment by reason for part-time work, sex and age group, annual (persons), CANSIM.

Table 1 Supply of tourism commodities, tourism expenditures and jobs in tourism industries and total economy, Canada, 2007 to 2012

	2007	2008	2009	2010	2011	2012
Total economy[1]						
Jobs (thousands)	17,101	17,382	17,086	17,391	17,687	17,864
percent change[2]	..	1.6	-1.7	1.8	1.7	1.0
Tourism supply[3]						
Supply of tourism commodities[4,5]	166,068	167,379	163,128	167,021	170,477	172,566
percent change	2.5	0.8	-2.5	2.4	2.1	1.2
Jobs in tourism industries (thousands)	1,622	1,652	1,606	1,629	1,661	1,686
percent change	2.2	1.9	-2.8	1.5	1.9	1.5
Tourism demand[6]						
Tourism demand[5]	58,349	58,884	57,138	59,535	61,603	62,706
percent change	3.2	0.9	-3.0	4.2	3.5	1.8
Jobs generated by tourism demand (thousands)	492	497	488	483	489	496
percent change	0.9	0.9	-1.8	-0.9	1.2	1.4

1. Source: Statistics Canada, CANSIM, Table 383-0031.
2. Not currently available for reference year 2007 due to the historical revision of the Canadian System of National Accounts.
3. Includes supply to local residents. Excludes tourism commodities produced in non-tourism industries.
4. Excludes non-tourism commodities produced in tourism industries.
5. Figures expressed in millions of constant 2007 dollars.
6. Excludes demand by local residents. Excludes tourism commodities produced in non-tourism industries.

Table 2 Annual compensation and hourly compensation in tourism industries and total economy, Canada, 2007 to 2012

	2007	2008	2009	2010	2011	2012	percent change 2011 to 2012
	millions of current dollars						%
Annual compensation in Canada for all jobs							
Total tourism industries	44,710	46,805	45,738	47,527	49,517	51,328	3.7
percent change	5.4	4.7	-2.3	3.9	4.2	3.7	...
Total economy[1]	835,905	871,615	868,621	896,290	936,303	973,547	4.0
percent change[2]	..	4.3	-0.3	3.2	4.5	4.0	...
Ratio tourism sector to total economy	0.053	0.054	0.053	0.053	0.053	0.053	...
	current dollars						%
Hourly compensation in Canada per job[3,4]							
Transportation	28.73	28.67	29.77	28.56	29.29	29.88	2.0
Air transportation	37.79	39.53	41.85	39.50	39.92	39.48	-1.1
Other transportation	26.34	26.01	27.00	25.92	26.69	27.38	2.6
Accommodation	17.65	18.08	18.63	19.43	19.69	20.19	2.6
Food and beverage services	12.84	13.60	14.16	14.96	15.29	15.36	0.5
Recreation and entertainment	21.65	21.95	22.43	23.52	24.56	25.16	2.4
Travel services	21.72	22.16	21.84	22.69	23.41	23.11	-1.3
Employee:	17.81	18.43	19.02	19.59	20.04	20.25	1.0
of which: wages	15.91	16.44	16.83	17.40	17.79	17.97	1.0
Self-employed[4]	16.50	16.50	16.54	17.12	17.82	18.18	2.0
Ratio self-employed to employee	0.926	0.896	0.870	0.874	0.889	0.898	...
Full-time	18.76	19.38	19.90	20.61	21.11	21.30	0.9
Part-time	13.59	13.99	14.72	15.00	15.49	15.62	0.8
Ratio part-time to full-time	0.725	0.722	0.739	0.728	0.734	0.733	...
Total tourism industries[1,4]	17.70	18.26	18.81	19.38	19.88	20.10	1.1
percent change	2.8	3.2	3.0	3.0	2.5	1.1	...
Total economy[1]	28.10	28.94	29.90	30.29	31.17	31.86	2.2
percent change[2]	..	3.0	3.3	1.3	2.9	2.2	...
Ratio tourism sector to total economy	0.630	0.631	0.629	0.640	0.638	0.631	...
Employee:	29.12	29.89	30.91	31.23	32.11	32.83	2.2
of which: wages	25.48	26.20	26.81	27.07	27.86	28.48	2.2
Self-employed	18.60	19.63	20.22	20.94	21.49	21.61	0.6
Ratio self-employed to employee	0.639	0.657	0.654	0.670	0.669	0.658	...
Full-time	28.25	29.08	30.06	30.39	31.23	31.87	2.0
Part-time	26.87	27.81	28.62	29.52	30.70	31.77	3.5
Ratio part-time to full-time	0.951	0.956	0.952	0.972	0.983	0.997	...

1. Source: Statistics Canada, CANSIM, Table 383-0031.
2. Not available for reference year 2007 due to the historical revision of the Canadian System of National Accounts.
3. Hourly compensation includes wages and salaries, supplementary labour income and the labour portion of mixed income after expenses accruing to the self-employed.
4. Excludes supplementary labour income from the labour portion of mixed income for the self-employed.

Table 3 Jobs in tourism industries and total economy, Canada, 2007 to 2012

	2007	2008	2009	2010	2011	2012	percent change 2011 to 2012
	thousands of jobs						%
Number of jobs in Canada							
Transportation	212	218	208	211	217	222	2.6
Air transportation	47	47	41	43	44	48	7.7
Other transportation	165	171	167	169	172	175	1.3
Accommodation	228	237	220	225	229	230	0.5
Food and beverage services	864	873	860	876	894	915	2.3
Recreation and entertainment	272	277	274	274	276	275	-0.4
Travel services	46	48	44	44	45	44	-1.5
Employee	1,509	1,537	1,495	1,516	1,554	1,582	1.8
Self-employed	114	116	111	114	107	104	-2.6
Ratio self-employed to total tourism	0.070	0.070	0.069	0.070	0.064	0.062	...
Full-time	996	1,005	971	973	990	1,022	3.3
Part-time	627	647	635	657	671	664	-1.0
Ratio part-time to total tourism	0.386	0.392	0.395	0.403	0.404	0.394	...
Total tourism industries	1,622	1,652	1,606	1,629	1,661	1,686	1.5
percent change	2.5	1.9	-2.8	1.5	1.9	1.5	...
Total economy[1]	17,101	17,382	17,086	17,391	17,687	17,864	1.0
percent change[2]	..	1.6	-1.7	1.8	1.7	1.0	...
Ratio tourism to total economy	0.095	0.095	0.094	0.094	0.094	0.094	...
Employee	15,468	15,767	15,449	15,753	16,060	16,256	1.2
Self-employed	1,633	1,615	1,637	1,637	1,628	1,608	-1.2
Ratio self-employed to total economy	0.096	0.093	0.096	0.094	0.092	0.090	...
Full-time	13,361	13,553	13,178	13,414	13,689	13,866	1.3
Part-time	3,739	3,829	3,908	3,977	3,999	3,998	0.0
Ratio part-time to total economy	0.219	0.220	0.229	0.229	0.226	0.224	...

1. Source: Statistics Canada, CANSIM, Table 383-0031.

2. Not currently available for reference year 2007 due to the historical revision of the Canadian System of National Accounts.

Table 4 Weekly hours worked in tourism industries and total economy, Canada, 2007 to 2012

	2007	2008	2009	2010	2011	2012	percent change 2011 to 2012
			hours				%
Weekly hours worked in Canada per job							
Transportation	34.5	34.7	34.0	34.2	33.9	33.7	-0.6
Air transportation	32.4	31.8	32.1	33.0	32.5	32.4	-0.4
Other transportation	35.1	35.6	34.4	34.5	34.2	34.0	-0.6
Accommodation	33.1	32.6	31.7	31.5	31.5	31.9	1.1
Food and beverage services	28.0	27.9	27.2	26.9	26.8	27.3	1.7
Recreation and entertainment	29.0	29.1	28.3	28.4	28.3	28.3	-0.2
Travel services	34.3	33.3	34.3	35.0	34.4	35.3	2.6
Employee	29.4	29.3	28.7	28.5	28.5	28.8	1.0
Self-employed	36.6	36.8	34.9	34.8	33.5	33.7	0.6
Ratio self-employed to employee	1.242	1.255	1.215	1.220	1.175	1.169	...
Full-time	38.8	38.9	38.0	37.9	37.8	37.9	0.2
Part-time	15.9	15.8	15.5	15.7	15.7	15.7	0.1
Ratio part-time to full-time	0.411	0.406	0.408	0.413	0.414	0.414	...
Total tourism industries	29.9	29.8	29.1	28.9	28.8	29.1	1.0
percent change	-0.1	-0.4	-2.4	-0.6	-0.3	1.0	...
Total economy[1]	33.4	33.3	32.7	32.7	32.7	32.9	0.7
percent change[2]	..	-0.4	-1.9	0.1	-0.2	0.7	...
Ratio tourism to total economy	0.895	0.895	0.890	0.885	0.883	0.885	...
Employee	33.4	33.3	32.7	32.8	32.8	33.0	0.7
Self-employed	33.7	33.2	32.3	31.9	31.4	31.6	0.6
Ratio self-employed to employee	1.010	0.995	0.987	0.972	0.957	0.956	...
Full-time	38.2	38.1	37.6	37.7	37.5	37.7	0.6
Part-time	16.3	16.3	16.2	16.0	16.0	16.1	0.4
Ratio part-time to full-time	0.427	0.429	0.432	0.424	0.427	0.426	...

1. Source: Statistics Canada, CANSIM, Table 383-0031.
2. Not available for reference year 2007 due to the historical revision of the Canadian System of National Accounts.

Table 5 Employee jobs, hours and wages by employee characteristics in tourism industries, Canada, 2012

	Total	Sex		Age group				Immigrant status	
		Female	Male	15 to 24	25 to 34	35 to 44	45 +	Immigrant	Non-immigrant
	thousands								
Number of employee jobs									
Transportation	198	60	139	11	33	36	118	43	155
Air transportation	47	19	28	4	11	11	21	11	36
Other transportation	151	40	110	8	22	25	97	31	119
Accommodation	224	134	90	57	46	34	86	55	169
Food and beverage services	894	531	363	430	178	113	172	214	680
Recreation and entertainment	226	110	116	85	39	31	70	30	196
Travel services	41	30	11	4	9	10	17	13	28
Full-time	957	485	473	183	233	185	356	251	706
Part-time	625	379	246	406	72	41	107	103	522
Total tourism industries	1,582	864	718	589	305	226	463	354	1,228
	hours								
Weekly hours worked per job									
Transportation	32.8	27.7	35.0	24.7	32.2	35.2	33.0	33.6	32.6
Air transportation	32.3	27.3	35.7	26.2	31.5	34.3	32.7	30.5	32.8
Other transportation	33.0	28.0	34.8	23.9	32.5	35.7	33.1	34.7	32.5
Accommodation	31.8	29.5	35.3	18.7	34.3	40.1	35.9	38.2	29.7
Food and beverage services	27.0	25.3	29.4	17.9	33.6	37.4	36.0	32.6	25.2
Recreation and entertainment	28.6	26.5	30.5	15.0	36.8	41.9	34.6	32.8	27.9
Travel services	35.2	34.4	37.5	22.8	37.6	39.0	35.0	37.4	34.2
Full-time	37.4	34.9	39.9	26.7	38.4	42.0	39.9	40.8	36.2
Part-time	15.7	16.0	15.2	13.6	20.0	20.8	18.6	16.6	15.5
Total tourism industries	28.8	26.6	31.5	17.7	34.1	38.2	35.0	33.8	27.4
	current dollars								
Hourly wages per job									
Transportation	27.26	23.87	28.41	16.60	23.87	27.67	28.81	24.17	28.13
Air transportation	33.33	27.45	36.40	15.52	23.72	34.56	40.00	30.17	34.26
Other transportation	25.39	22.21	26.32	17.19	23.95	24.62	26.39	22.26	26.27
Accommodation	18.27	16.50	20.48	13.06	16.52	19.20	20.57	20.34	17.41
Food and beverage services	14.01	13.36	14.82	11.44	14.23	15.46	15.99	14.01	14.01
Recreation and entertainment	22.25	20.56	23.66	14.16	20.42	24.29	26.49	22.62	22.19
Travel services	21.72	19.97	26.07	13.57	17.82	23.21	24.31	20.63	22.29
Full-time	19.08	16.66	21.25	12.55	16.80	19.86	22.36	17.65	19.66
Part-time	13.91	13.64	14.36	11.71	14.80	17.06	18.08	15.29	13.63
Total tourism industries	17.97	15.86	20.11	12.10	16.52	19.58	21.83	17.31	18.21
	current dollars								
Annual wages per job									
Transportation	46,489	34,431	51,681	21,292	39,938	50,673	49,449	42,202	47,666
Air transportation	55,916	38,903	67,543	21,114	38,796	61,587	67,964	47,818	58,475
Other transportation	43,524	32,300	47,632	21,380	40,521	45,661	45,391	40,159	44,406
Accommodation	30,220	25,287	37,586	12,728	29,435	40,068	38,354	40,453	26,910
Food and beverage services	19,642	17,598	22,630	10,644	24,844	30,077	29,911	23,734	18,356
Recreation and entertainment	33,062	28,380	37,499	11,027	39,044	52,929	47,651	38,590	32,220
Travel services	39,813	35,733	50,854	16,102	34,844	47,086	44,248	40,152	39,653
Full-time	37,107	30,248	44,144	17,447	33,515	43,327	46,360	37,464	36,981
Part-time	11,351	11,332	11,379	8,302	15,403	18,472	17,490	13,169	10,992
Total tourism industries	26,935	21,948	32,931	11,149	29,260	38,864	39,677	30,400	25,936

Appendix A: Accounting framework

The Human Resource Module (HRM) is based on and rooted in the accounting framework of the Canadian Tourism Satellite Account (CTSA), which follows the international guidelines in Recommended Methodological Framework: Tourism Satellite Account (TSA: RMF).[12] In turn, the TSA: RMF is based on the accounting framework and principles of the internationally recognized System of National Accounts (SNA).[13]

The CTSA currently follows the guidelines of the TSA: RMF 2000. Along with the new SNA 2008 standard, a TSA: RMF 2008 has been released. The CTSA accounting framework will be updated to follow these newer guidelines following the historical revision of the CSNA. This update will be reflected in the next annual update of the HRM.

Because the HRM uses the same framework, concepts and definitions as the CTSA, results from both can be readily compared. By extension, the HRM results can be compared to those of the Canadian System of National Accounts (CSNA), in particular, to the number of jobs, hours worked and labour income in other industries in the economy. This enhances the analytical capacity of the HRM.[14]

12. Commission of the European Communities, Organisation for Economic Co-operation and Development, World Tourism Organization, United Nations Statistics Division, 2008.
13. Commission of the European Communities, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations, World Bank, 2008.
14. Some conceptual differences exist between the Canadian TSA and the international guidelines in the TSA-RMF. See Katharine Kemp and Shaila Nijhowne, 2004.

Appendix B: Concepts and definitions

The Human Resource Module (HRM) carries information on the number of employee and self-employment jobs, full-time equivalent employment, total number of hours worked and labour income, gross wages and salaries and supplementary labour income. Some of these basic concepts and definitions are described next. They are discussed from a total industry perspective first, that is to say, regardless of the source of demand, tourism or non-tourism.

In the HRM, total employment in an industry is the number of all employee and self-employment jobs in that industry. It should be noted that a job that exists for only part of the year (e.g., 4 months) counts as only a fraction of a job (1/3 of a job) for the year. It should also be noted that a part-time job at 10 hours a week counts as much as a full-time job at 50 hours a week; each is one job. For this reason, jobs are not a good measure of labour inputs to production.

A better measure is full-time equivalent employment in which part-time jobs are converted to full-time jobs on the basis of hours worked. For example, two part-time jobs of twenty hours per week would be equivalent to one full-time job at forty hours per week. Total hours worked is an even better measure of aggregate volume of labour inputs to production, and the one used in the Canadian System National Accounts (CSNA) to calculate labour productivity. The concept here is that of actual hours worked, not usual hours, and of hours worked, not hours paid (see Appendix C.1).

The value of labour inputs to production in an industry is measured by the labour income and a labour component of mixed income for all jobs in that industry. Labour income consists of gross (i.e., before tax) wages and salaries, including tips,[15] commissions, bonuses, as well as supplementary labour income which covers mandatory and non-mandatory employer contributions to pension plans and social insurance and health plans.[16] Mixed income is the income after expenses of unincorporated business accruing to the self-employed.[17]

Work is currently underway to develop estimates on the number of jobs that can be directly attributed to, or generated by, tourism demand. These estimates will provide the link between the HRM and the Canadian Tourism Satellite Account (CTSA) and National Tourism Indicators (NTI). Tourism employment in an industry (concept used in the CTSA and NTI) is the number of jobs generated by, or attributable to, visitor spending on the goods and/or services produced by that industry. The difference between tourism employment and total employment (concept used in the HRM) is the number of jobs attributable to non-tourism (i.e., not directly attributable to tourism demand).

As an example, if the full-service restaurants industry has a total of 100,000 jobs, only the share that is directly associated with tourism (say 25%, or 25,000 jobs) represents the tourism employment in this industry. Similarly, only 25% of the full-time equivalent employment, total hours worked and labour income is attributed to tourism. Derived variables, such as annual average hours worked and annual average wage and salary per tourism job, as well as the average hourly earnings per hour worked per tourism job are assumed to be the same for all jobs in an industry.

At the core of the CTSA and the NTI is the definition of tourism. Tourism is defined according to international standards as: "the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes not related to the exercise of an activity remunerated from within the place visited". Persons who engage in tourism, so-defined, are called visitors. Visitors consist of tourists (those who visit and stay outside their usual environment for at least one night) and same-day visitors.

The definition of tourism is quite broad in that both personal and business trips are included. The international standard does not precisely spell out the notion of usual environment, thereby allowing a country to apply its own specifications. For operational purposes, Canada has defined the concept of usual environment as the area less than 80 kilometres one-way from home.[18] On the other hand, crossing an international boundary is considered tourism

15. The imputation of unreported tips in the CSNA is described in Appendix C, C.1.
16. Includes Medicare, dental plans, short-term and long-term disability plans, life insurance, etc.
17. Mixed income is found in the CTSA. For the HRM, an imputation is made for the labour component of mixed income. See the discussion of Appendix D: Methodology Step 1.
18. The operational definition of tourism has been revised with the new, redesigned Travel Survey of Residents of Canada. Tourism will now include all overnight "out of town" trips and same-day trips exceeding forty kilometres one way from home. In addition to the usual exclusions, routine trips, such as for grocery shopping, will be excluded even if "out of town" or over forty kilometres.

regardless of the distance travelled. It should be noted that not all travel is tourism. In particular, the definition rules out several types of travel, including commuting to and from work or school, travel by armed forces and diplomats, as well as migration.

Tourism demand is the spending by Canadian and non-resident visitors on domestically produced commodities. This spending has a direct impact on a wide range of industries, some more so than others. This leads to a definition of a tourism industry as one that would cease to exist without tourism, or would continue to exist only at a significantly reduced level of activity. By this definition, travel services is a tourism industry, while retail trade, which derives some of its business from visitors, is not. A tourism commodity is a good or service for which a significant part of its total demand comes from visitors. Air passenger transportation is a tourism commodity, while groceries, although occasionally bought by visitors, is not, because most groceries are bought by local residents.

Gross domestic product (GDP) can be defined as the unduplicated value of production of goods and services within the geographic boundaries of a country or region (e.g., province, territory).[19] Tourism GDP is the GDP that can be attributed to the production of goods and services consumed directly by visitors.[20] In the CTSA, tourism GDP is calculated as the sum of the labour income, mixed income (net income of unincorporated business) and other operating surplus (corporate profit and depreciation) that can be directly attributed to visitor spending.[21]

Several socio-demographic variables are available in the HRM. One of these, immigrant status, is defined as follows: an immigrant is a permanent resident who is not a Canadian citizen at birth or is a person who holds a study or work permit or who is a refugee claimant or is a family member living with a refugee claimant. A non-immigrant is a person who is a Canadian citizen at birth.

19. Unduplicated means that values are not double counted. If, for example, the value of fuel used by aircraft is counted along with airfares (which already include the costs of fuel inputs) the value of the fuel would be counted twice. Instead, only the value added (the difference between revenues from sales of goods and services produced and the cost of intermediate inputs of goods and services) at each stage of production is counted in GDP. It should be noted that GDP in the CSNA and CTSA is measured at basic prices. This means essentially that valuation is at the prices received by sellers, and does not include taxes on the sale of goods and services.

20. The qualifier "directly" is important. To continue the example from above, "directly" means that only the GDP generated in the production of passenger air transportation (which visitors consume in their travels) can be counted in tourism GDP, not any of the GDP or value added generated in the production of goods and services that are inputs to air transport (like the fuel which airlines use). It is in this sense that tourism GDP is directly attributable to visitor spending. There is, of course, GDP generated in the upstream production chain that can be attributed to tourism, but only indirectly. Estimates of indirect effects of tourism can be obtained from economic impact models.

21. In the CTSA, GDP is calculated using the sum of incomes generated by production approach, one of the three approaches to measuring GDP. The other two approaches are based on summing (1) the final expenditures on goods and services produced, and (2) the value added generated in the production of goods and services.

Appendix C: Data sources

There are four main sources of data underlying the Human Resource Module (HRM). They are the Canadian Productivity Accounts (CPA) data in the Canadian System of National Accounts (CSNA), the Census, the Labour Force Survey (LFS), and the Survey of Employment Payroll and hours (SEPH). These are described below along with their main uses.

C.1 Canadian System of National Accounts

The CPA database in the CSNA provides the tourism industry group totals for employee jobs and hours worked, labour income, wages and salaries and supplementary labour income, for both full-time and part-time jobs. Comparable data are also available for self-employment jobs, but the income variable is the net income of unincorporated businesses. These totals are for all jobs, including those attributable to both tourism and non-tourism demand. The data are classified on a North American Industry Classification System (NAICS) basis by province.

The CPA data for jobs are based, in turn, on the LFS estimates for the number of persons employed. This is adjusted to jobs by adding the second jobs of multiple-job holders.[22] Additions are made for employment not covered by the LFS (e.g., regular military, employed persons in the territories or living on Indian reserves, and civil servants working in Canadian embassies abroad) to reflect the total economy. Last, deductions are made to exclude those absent from work without pay during the reference week.[23] SEPH is primarily used to develop the industry allocation of the adjusted LFS benchmarks, although industry surveys and administrative sources (for example T4 slips)[24] are also used for selected industries.

The hours worked data include the following:

- hours actually worked during normal periods of work
- time worked in addition to hours worked during normal periods of work, and generally paid at higher rates than the normal rate (overtime)
- time spent at the place of work on work such as the preparation of the workplace, repairs and maintenance, preparation and cleaning of tools, and the preparation of receipts, time sheets and reports
- time spent at the place of work waiting or standing-by for such reasons as lack of supply of work, break-down of machinery, or accidents, or time spent at the place of work during which no work is done but for which payment is made under a guaranteed employment contract
- time corresponding to short periods of rest at the workplace, including tea and coffee breaks.

They exclude:

- hours paid for but not actually worked, such as paid annual leave, paid public holidays, paid sick leave
- meal breaks
- time spent on travel to and from home and work.

The hours worked data are adjusted to correct for reference week effects in order to estimate annual hours worked.

22. Industry of second job is determined based on patterns observed for multiple job holders in the Survey of Labour Income Dynamics.
23. For more details on the current CSNA methodology see Maynard 2005.
24. Forms used by the Canada Revenue Agency for the employer to report the summary of remuneration paid to all employees who received salary, wages, tips or gratuities, bonuses, vacation pay, employment commissions and other remuneration.

In the CSNA, industry totals for wages and salaries come from a detailed reconciliation of wages and salaries from survey data and T4 administrative data. Estimates for components of supplementary labour income come in part from the T4 system (e.g., employer contributions to Employment Insurance (EI) and Quebec and Canada Pension Plans (Q/CPP)), administrative data on registered pension plans and from Workers Compensation Boards, as well as other survey sources (for contributions like life, accident and health insurance).

It should be noted that adjustments for unreported tips are made to the benchmarks for several industries:

- Performing arts and spectator sports and related industries (NAICS 711)
- Amusement, gambling and recreation industries (NAICS 713)
- Accommodation services (NAICS 721)
- Food services and drinking places (NAICS 722).

The adjustments for tips are made on the basis of industry sales of alcoholic beverages, full service restaurant meals (no tips are assumed on fast food), and accommodation. There are additional, smaller imputations for the tips in personal care services (barbershops and beauty salons, etc.) and railway transportation (for luggage porters) industries.

It should be noted that the average hourly earnings are calculated in the HRM as wages and salaries divided by total hours worked. Because tips and pay for absences (sick leave, vacations, etc.) are included in wages and salaries, the hourly earnings include an implicit premium on top of the straight wage for both.

C.2 Census of Population

The Census of Population provides comprehensive data on the demographic, social and economic characteristics of Canadians. Detailed information was collected from one in every five households for census reference years 2000 and 2005. Given its large sample size, the Census serves as the most reliable source of information on occupational distributions. As such, data from the 2001 and 2006 Census are used primarily to distribute the CSNA totals for employee jobs, hours worked and wages and salaries across occupations by sex and age group, and between immigrants and non-immigrants.

The data used in these calculations are based on occupational distributions for persons who had employment income in the census reference years (in this case, 2000 and 2005). The self-employed are excluded in the calculations.

The samples are broken down into part-and full-time categories according to whether the weeks worked in the reference year were primarily full-time (30 or more hours per week) or part-time (less than 30 hours per week). Also, industry group and occupation relate to the main job held during the reference week (defined as the job at which the most hours were worked) or, if unemployed, to the main job held since the start of the reference year (defined as the one in which the most weeks were worked).

Tabulations for this study use the National Occupational Classification for Statistics (NOC-S) 2006 and NAICS 2002 for the 2006 Census and NOC-S 2001 and NAICS 1997 for the 2001 Census. Differences between classification systems do not affect tourism industries and occupations.

C.3 Labour Force Survey

The Labour Force Survey (LFS) is conducted monthly and includes approximately 53,400 households, which translates roughly to a sample size of 100,000 people over the age of fifteen. The LFS collects basic labour force activity information including industry and occupation of employment for the survey reference week (normally the week including the 15th of the month), both for employees and the self-employed. It does not cover the territories, military personnel or civil servants stationed abroad, or persons residing on Indian reserves. Industry data are based on NAICS 2007, while occupation data use NOC-S 2006 for the entire period from 1997 to 2012.

The LFS is used here to develop the time series on jobs, hours worked and wages and salaries by occupation, age and gender for each industry group in the HRM. As mentioned previously, the LFS is used in the CSNA to establish overall number of jobs totals.

C.4 Survey of Employment, Payrolls and hours

The Survey of Employment, Payrolls and hours (SEPH) is conducted monthly. It collects the number of employee jobs and payroll data from a sample of establishments in Canada.

In this survey, establishments are coded by industry through the Business Register, thereby providing a reliable source of timely information on the industry distribution of employee jobs and payrolls. The administrative data are supplemented by the monthly Business Payroll Survey of 11,000 businesses. This survey collects data on employment, earnings and paid or usual hours, according to whether workers are paid by the hour, salaried or remunerated some other way.

SEPH data on a NAICS basis are available back to 1991. Data on the number of jobs, hours paid and earnings are used here to break down the CPA estimates so that they correspond to the definition of tourism industries used in the Canadian Tourism Satellite Account (CTSA). As mentioned earlier, SEPH is also used extensively in the CSNA to determine the industry distributions of employee jobs.

Appendix D: Methodology

The basic methodology consists of six steps:

1. taking totals from the Canadian System of National Accounts (CSNA) for jobs, hours worked, and wages and salaries
2. disaggregating these totals, using data from the CSNA for full-time and part-time jobs
3. distributing the CSNA totals for 2000 and 2005 across occupations, sex and age groups, and immigrant status based on census data
4. building time series from these benchmarks based on movements in corresponding series from the Labour Force Survey (LFS)
5. smoothing the time series for LFS occupations, while keeping the overall industry group totals
6. making limited, final adjustments to data values.

The following describes the methodology and implicit assumptions in more detail.

Step 1: Benchmark totals

The industry group totals for jobs, hours worked, labour income and wages and salaries, including the details by class of worker (employee or self-employed), by full- and part-time status, are from the Canadian Productivity Accounts (CPA) database.

These data do not exactly meet requirements, however, and a number of adjustments are needed. In particular:

1. The labour component of mixed income from self-employment is imputed by multiplying the hours worked in self-employment by the average hourly wage per employee job. This method assumes that the self-employed and paid employees earn the same on average.[25] However, the imputation is imposed at the lowest level of the CPA database, resulting in differences in earnings between self-employed and paid employees in tourism industry aggregates.
2. The CSNA jobs data follow the CSNA version of North American Industry Classification System (NAICS), which is simply a special aggregation that defines the working level (W level) industries of the Input-Output Tables. At this level, detail is available only for two parts of accommodation services, traveller accommodation (NAICS 7211) and RV parks, recreational campgrounds and rooming and boarding houses (NAICS 7212 + NAICS 7213 = 721A at the W level). An adjustment is required to remove rooming and boarding houses. This is done using details from Survey of Employment Payroll and hours (SEPH) on the industry's share of overall jobs, hours and earnings. These shares are used to adjust both employee and self-employment jobs. The same method is used to remove the non-tourism sub-industries of rail transportation (NAICS 4821), automotive equipment rental and leasing (NAICS 5321), food services and drinking places (NAICS 7220), performing arts, spectators and related industries (NAICS 7110) and amusement and recreation industries (NAICS 7131+ NAICS 7132 + NAICS 7139 = 713A at the W level).

Step 2: Distribution of CSNA data by full- and part-time status

Data from the CPA database in the CSNA are used to split jobs, hours worked and income by full-time and part-time status.

25. In past updates this imputation included supplementary labour income (SLI). However, self-employed do not contribute to the majority of plans/programs included in SLI. Since 2009, SLI is excluded from labour income for self-employed.

Step 3: Distribution of industry totals by occupation

Information on the occupational distribution of jobs comes from the Census. Step 3 involves using this source to distribute the CSNA totals by occupation, sex, age group and immigrant status.

This step relates only to employee jobs, as occupational details are not developed for the self-employed. The Census of Population is used to distribute the industry group totals established in the second step for the years 2000 and 2005 (i.e., the reference years for the 2001 and 2006 Censuses).

To develop occupational distributors for the industry group totals, special census tabulations are prepared, identifying persons in the tourism industries who had employment income in the reference year and were not self-employed. The selected persons are grouped according to their industry and whether they worked mainly full-or part-time during the reference year. For each of these groups the distribution of the (weighted) sample by occupation is determined, as well as the distribution of total hours worked and wage and salary income.

The occupational distributor for hours worked is based on the distribution of total hours (jobs multiplied by average hours worked) across occupations within each industry group.

The occupational distributor for wages and salaries is based on the distribution of total wages and salaries (jobs multiplied by hours worked multiplied by hourly earnings) across occupations in each industry group.

Step 4: Building the occupational time series

Step 4 entails using the corresponding LFS annual average series by occupation, age group and sex to build a time series. Information on immigrant status while available from the LFS was not considered robust enough at the detailed level, and therefore the percentage distribution from the census reference years (2000 and 2005) is used. To take into account the change in the immigrant ratio, a linear interpolation is used between the two censuses, and the ratio is fixed outside census years. The LFS data are adjusted to the census levels to maintain growth rates between the census years.

Step 5: Smoothing the LFS data

Step 5 entails smoothing (using a four-year moving average) to reduce volatility in the occupational time series found in the LFS. It is implemented in a way that preserves the overall industry group totals (from the CSNA) and the occupational distributions (from the 2001 and 2006 Census).

A simple moving average is applied to the indicators (discussed in Step 3) used to build the time series on jobs, hours worked and wages and salaries, full-and part-time, by occupation and for each industry. A four-year moving average was judged to provide the best results overall in terms of reasonableness and consistency, reduced volatility, and minimizing the need for manual adjustments.

Step 6: Other adjustments

The last step in developing the total industry estimates involves adjustments when the smoothed series appear out of line or generate erratic movements in the implied average annual hours or average hourly earnings. More specifically, adjustments are made if hourly earnings are more than four times higher than the corresponding occupation average or less than half of the Ontario minimum wage or if hours reported are more than 70 hours a week.[26] Results indicate that the smoothing and adjustments have little effect on the general pattern of the occupational distributions.

26. For details on Ontario minimum wage and standard hours for hours of work, see *Ontario Employment Standards Act, 2000* and regulations 285/01.

Appendix E: Tourism industries in the Human Resource Module

This study uses the North American Industry Classification System (NAICS) 2002 to define the tourism-related industries. Briefly, NAICS is a comprehensive industry classification system encompassing all economic activities. It is designed for the compilation of production statistics and, therefore, for the classification of data relating to establishments (and locations). The criteria used to group establishments into industries in NAICS are similarity of input structures, labour skills or production processes used.

In order to maintain the reliability of the data, several tourism industries have been grouped together. Thus the tourism industry groups of the Human Resource Module (HRM) include:

Transportation

- Air transportation
- All other transportation (includes rail, water, bus, taxi and vehicle rental)

Accommodation

Food and beverage services

Recreation and entertainment

Travel services.

Following is a detailed list of all tourism industries, including their NAICS codes.

Detailed list of tourism industries by North American Industry Classification System (NAICS) 2002

Transportation

Air transportation

4811 Scheduled air transport

4812 Non-scheduled air transport

All other transportation industries

4821 Rail transportation

of which:

Tourism sub-industries

482114 Passenger rail transportation

Non-tourism sub-industries

482112 Short-haul freight rail transportation

482113 Mainline freight rail transportation

4831 Deep sea, coastal and great lakes water transportation

4832 Inland water transportation

4851 Urban transit systems

4852 Interurban and rural bus transportation

4853 Taxi and limousine service

4854 School and employee bus transportation

4855 Charter bus industry

4859 Other transit and ground passenger transportation

4871 Scenic and sightseeing transportation, land

4872 Scenic and sightseeing transportation, water

4879 Scenic and sightseeing transportation, other

5A0510[1] Automotive equipment rental and leasing

of which:

Tourism sub-industries

532111 Passenger car rental

532120 Truck, utility trailer and RV (recreational vehicle) rental and leasing

Non-tourism sub-industries

532112 Passenger car leasing

Accommodation

7211 Traveller accommodation

721A[1] RV (recreational vehicle) parks and recreational camps

of which:

Tourism sub-industries

721211 RV (recreational vehicle) parks and campgrounds

721212 Hunting and fishing camps

721213 Recreational (except hunting and fishing) and vacation camps

Non-tourism sub-industries

721310 Rooming and boarding houses

Food and beverage services

7220 Food services and drinking places

of which:

Tourism sub-industries

72211 Full-service restaurants

72221 Limited-service eating places

72241 Drinking places (alcoholic beverages)

Non-tourism sub-industries

72231 Food service contractors

72232 Caterers

72233 Mobile food services

Recreation and entertainment

51213 Motion picture and video exhibition

7110 Performing arts, spectator sports and related industries

of which:

Tourism sub-industries

7111 Performing arts companies

7112 Spectator sports

7115 Independent artists, writers and performers

Non-tourism sub-industries

7113 Promoters (presenters) of performing arts, sports and similar events

7114 Agents and managers for artists, athletes, entertainers and other public figures

7121 Heritage institutions

713A[1] Amusement and recreation industries

7131 Amusement parks and arcades

7132 Gambling industries

7139 Other amusement and recreation industries

of which:

Tourism sub-industries

71391 Golf courses and country clubs

71392 Skiing facilities

71393 Marinas

71395 Bowling centres

71399 All other amusement and recreation industries

Non-tourism sub-industries

71394 Fitness and recreational sports centres

Travel services

5615 Travel arrangement and reservation services

1. Special aggregation of NAICS industries in the Canadian System of National Accounts (CSNA).

Appendix F: Tourism occupations in the Human Resource Module

This study uses the National Occupational Classification for Statistics (NOC-S) definitions of occupations. An occupation is defined in this classification as a collection of jobs, sufficiently similar in work performed to be grouped under a common title for classification purposes.

The selection of occupations is based on an examination of the occupational data for the 2001 Census for persons in the experienced labour force whose main job was in one of the tourism industry groups. Occupations with an estimated 5,000 employed persons or more were selected for this study. Occupations were added if in the 2006 Census they obtained more than 5,000 employed persons. Occupations were removed if in the 2006 Census they obtained fewer than 2,500 employed persons. These occupations were not common enough to support time series based on smaller samples from the Labour Force Survey (LFS). Between 2,500 and 5,000 employed persons some occupations were removed.

A detailed listing of occupations along with their NOC-S codes follows.

Detailed list of tourism occupations by National Occupational Classification for Statistics (NOC-S) 2006

Occupations listed by tourism industry groups	NOC-S 2006
Accommodation	
Accommodation service managers	A222
Program leaders and instructors in recreation, sport and fitness	F154
Chefs	G411
Cooks	G412
Bartenders	G512
Food and beverage servers	G513
Hotel front desk clerks	G715
Light duty cleaners	G931
Janitors, caretakers and building superintendents	G933
Food counter attendants, kitchen helpers and related occupations	G961
All other accommodation occupations	
Transportation	
Air transportation	
Air pilots, flight engineers and flying instructors	C171
Pursers and flight attendants	G712
Airline sales and service agents	G713
Aircraft mechanics and aircraft inspectors	H415
Air transport ramp attendants	H737
All other air transportation occupations	
All other transportation	
Transportation managers	A373
Retail salespersons and sales clerks	G211
Automotive service technicians, truck and bus mechanics and mechanical repairers	H421
Bus drivers and subway operators and other transit operators	H712
Taxi and limousine drivers and chauffeurs	H713
Railway and yard locomotives engineers	H721
Railway conductors and brakemen/women	H722
All other transportation occupations	

Occupations listed by tourism industry groups	NOC-S 2006
Food and beverage services	
Restaurant and food service managers	A221
Food service supervisors	G012
Cashiers	G311
Chefs	G411
Cooks	G412
Maîtres d'hôtel and hosts/hostesses	G511
Bartenders	G512
Food and beverage servers	G513
Bakers	G942
Food counter attendants, kitchen helpers and related occupations	G961
Delivery and courier service drivers	H714
All other food and beverage services occupations	
Recreation and entertainment	
Recreation, sports and fitness program and service directors	A343
Technical occupations related to museums and art galleries	F112
Program leaders and instructors in recreation, sport and fitness	F154
Retail salespersons and sales clerks	G211
Cashiers	G311
Security guards and related occupations	G631
Casino occupations	G723
Operators and attendants in amusement, recreation and sport	G731
Janitors, caretakers and building superintendents	G933
Food counter attendants, kitchen helpers and related occupations	G961
Landscaping and grounds maintenance labourers	I212
All other recreation and entertainment occupations	
Travel services	
Retail trade managers	A211
Travel counsellors	G711
All other travel services occupations	

Appendix G: Table structure

The structure of the Human Resource Module (HRM) tables is detailed below.

Tables are available on demand for each of the five tourism industry groups (see Appendix C) included in the HRM, as well as a total for all industries. Details are also available on the air transportation and all other transportation sub-industries of the transportation industry group.

Total employment, hours worked and wages and salaries are available for each industry group. Derived variables including average annual hours worked, average annual wage and salary and average hourly wages are also included.

These variables are split into the following categories:

a. Full-time female

b. Part-time female

c. Full-time male

d. Part-time male

e. Total male

f. Total female

g. Total part-time

h. Total full-time

i. Total

Each of the above categories is split into occupational details (see Appendix F).

The categories "e" to "h" are further split into immigrants and non-immigrants, while the category "i" is further divided up into four age categories: 15 to 24, 25 to 34, 35 to 44, 45 and over.

It might be noted that for publication purposes, cells of the HRM tables are suppressed whenever the estimated number of jobs is less than twenty. Below this threshold, the data are considered confidential.

Tables on annual employment in tourism industries are now available upon request. Tables on the annual employment directly attributable to tourism (i.e., tourism employment) and quarterly data are a work-in-progress.

Glossary of terms

Basic prices: A basic price valuation including the costs of production factors (labour and capital) and indirect taxes and subsidies on production factors. It represents essentially the prices received by the sellers, and does not include taxes on the sales of goods and services.

Employee jobs: All jobs in which the person employed draws compensation for services rendered and for whom the employer must complete a Revenue Canada T4 form. Jobs in which workers are paid by tips or commissions are included. Self-employed proprietors of unincorporated enterprises and unpaid family workers are not included.

Full-time job: One in which a person usually works 30 hours or more per week.

Full-time equivalent employment: Is the number of full-time equivalent jobs.

Full-time equivalent (FTE) jobs: Is defined as total hours worked divided by average annual hours worked in full-time jobs. This can also be described as full-time-equivalent work-years. It is a less precise alternative to expressing labour input in terms of total hours worked.

Gross domestic product (GDP): The total unduplicated value of the goods and services produced in the economic territory of a country or region during a given period. GDP can be measured three ways: as total incomes earned in current production (income approach), as total final sales of current production (expenditure approach), or as total net values added in current production (value added approach). It can be valued either at basic prices or at market prices.

Hours worked: Actual hours worked during normal periods of work, including overtime but excluding paid leave (e.g., holidays, sick leave).

Immigrant: In this study, an immigrant is defined as a person who is a landed immigrant (or has been and has become a Canadian citizen) or a non-permanent resident. A landed immigrant is a permanent resident who is not a Canadian citizen at birth. A non-permanent resident is a person who holds a study or work permit or who is a refugee claimant or is a family member living with this refugee claimant.

Industry: An industry is a group of establishments engaged in the same or a similar kind of economic activity.

Job: A job is defined as an explicit or implicit contract between a person and an institutional unit to perform work in return for compensation for a defined period or until further notice. The institutional unit may be the proprietor of an unincorporated enterprise; in this case the person is described as being self-employed and earns a mixed income. The number of jobs exceeds the number of persons employed by the number of second, third, etc. jobs.

Jobs generated by tourism: Jobs that can be directly attributed to tourism demand.

Labour force: The civilian non-institutional population 15 years of age and over who are either employed or unemployed.

Labour income: Total earnings of employees, consisting of wages and salaries as well as supplementary labour income (such as employer's contributions to pension funds, employee welfare funds, the Employment Insurance Fund and Worker's Compensation Funds).

Main job: The job at which the most hours are worked.

Market prices: A valuation expressed in terms of the prices actually paid by the purchaser, that is, after all applicable taxes (including taxes on the sale of goods and services) and subsidies.

Mixed income: Mixed income is a balancing item in the industry accounts of the Input-Output accounts, representing the return to both self-employed labour and capital of the unincorporated business. Mixed income consists of earnings of proprietors of unincorporated businesses (sole proprietorships and partnerships) such as retailers and consultants, earnings of independent professional practitioners such as lawyers and dentists, net (after expenses) rental income of owners of real property and the accrued net farm income of farm operators.

Multiple-job holder: A person who is employed in more than one job during the reference period.

Non-immigrant: In this study, a non-immigrant is a person who is a Canadian citizen at birth.

Occupation: A collection of jobs, sufficiently similar in work performed (tasks, duties and responsibilities) to be grouped under a common title for classification purposes.

Part-time job: One in which a person usually works less than 30 hours per week.

Satellite account: An accounting system that follows the basic principles of the System of National Economic Accounts but also expands the analytical capacity for selected areas of economic or social concern, without overburdening or disrupting the central system. Satellite accounts are linked with the central framework of the national accounts and through them to the main body of integrated economic statistics.

Self-employment jobs: Includes working-owners of unincorporated enterprises, and members of their households who work without a wage or salary (i.e., unpaid family workers).

Supplementary labour income: Expenditures by employers on their labour account which are regarded as compensation of employees. It includes contributions to employment insurance, private and public pension plan contributions, worker's compensation, health and life insurance plans, and retirement allowances.

System of National Accounts (SNA): The System of National Accounts (SNA) consists of a coherent, consistent and integrated set of macroeconomic accounts, balance sheets and tables based on a set of internationally agreed concepts, definitions, classifications and accounting rules. In its broad outline, the Canadian System of National Accounts (CSNA) bears a close relationship to the international standard as described in the United Nations publication: System of National Accounts 1993.

Total hours worked: The aggregate number of hours actually worked during the year in employee and self-employment jobs.

Tourism: The definition of tourism adapted from the World Tourism Organization and the United Nations Statistical Commission is: "the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes."

Tourism commodity: Tourism commodity is one for which an important part of its total demand in Canada comes from visitors.

Tourism demand: The spending of Canadian visitors and non-resident visitors on domestically produced commodities. It is the sum of tourism domestic demand and tourism exports.

Tourism employment: The number of jobs in tourism and non-tourism industries that can be directly attributed to tourism demand. Someone who works 10 hours a week counts for as much, by this measure, as someone who works 50 hours a week. This is also called "employment generated by tourism".

Tourism industry: An industry which as a direct result of the absence of tourism would cease or continue to exist only at significantly reduced levels of activity. Some industries may be affected by the absence of tourism but not directly, for example the absence of tourism would greatly affect the air transportation industry and thus indirectly the catering industry.

Tourism Satellite Account: Tourism Satellite Account is an accounting framework, based on the System of National Accounts that serves to define tourism and is used to compile and integrate statistics on tourism, to measure its importance to the economy, and to facilitate its comparison with other industries within the economy.

Visitors: Visitors are persons who undertake tourism as defined above. They are referred to as either tourists (those who stay overnight or longer in the place visited), or same-day visitors. In Canada, "tourist" is used to denote all visitors, whether they are same-day or overnight visitors.

Wages and salaries: Consists of monetary compensation and payments-in-kind (e.g., board and lodging), to wage earners and salaried persons employed in private, public and non-profit institutions in Canada including domestic servants and baby-sitters. Other forms of compensation included are commissions, bonuses, tips, directors' fees, taxable allowances, and the values of stock options of corporations. Bonuses, commissions and retroactive wages are recorded in the period paid rather than earned. Wages and salaries are recorded on a gross basis, before deductions for taxes, employees' contributions to employment insurance, and private and public pension plans.

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